



Economic Growth, International Financial Integration, and Geopolitical Uncertainty: A PVAR Approach Across Developed and Developing Countries

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ABSTRACT

This study investigates the relationship between international financial integration (IFI) and economic growth (GDP) under the influence of geopolitical risk (GPR). Using a balanced panel of 60 countries—classified into developed and developing economies—over the period 1995–2023, the analysis applies a Panel Vector Autoregressive (PVAR) framework to examine the dynamic linkages among GDP, IFI, foreign direct investment (FDI), and GPR. The empirical results reveal that IFI exerts a positive and statistically significant impact on economic growth across both country groups. However, the magnitude of the effect is stronger in developed economies, reflecting their higher institutional quality and more advanced financial systems. In contrast, developing economies are more susceptible to adverse shocks arising from geopolitical tensions, which tend to undermine GDP growth and offset some of the gains associated with financial integration. Impulse response functions and forecast error variance decompositions confirm the presence of bidirectional causality between IFI and economic growth, with notable heterogeneity and non-linearities across income groups. Overall, the findings highlight the importance of institutional quality and risk management frameworks in enabling economies to maximize the growth benefits of financial integration while mitigating their exposure to geopolitical risks.

Keywords: International Financial Integration, Economic Growth, Geopolitical Risk, PVAR, Developed and Developing Countries, FDI

JEL Classifications: F21, F36, G15, O16, C33

1. INTRODUCTION

The growing globalization of financial markets has profoundly reshaped the growth trajectories of economies worldwide. International financial integration (IFI)—characterized by the reduction of barriers to capital mobility and the increasing interconnectedness of global financial systems—has been widely recognized as a key driver of economic expansion. By facilitating cross-border capital flows, IFI enables economies to access foreign savings, improve resource allocation, and enhance risk-sharing. These mechanisms foster higher levels of investment and innovation, ultimately promoting faster and more sustainable economic growth.

In theory, international financial integration also helps mitigate domestic economic pressures by promoting risk diversification and lowering the cost of capital. Such theoretical expectations align with the experience of numerous advanced and emerging market economies that have liberalized their capital accounts and subsequently witnessed robust growth performance.

However, the benefits of financial integration have proven uneven across countries following financial liberalization. While some economies have experienced higher productivity and sustained growth, others have faced increased volatility, exposure to external shocks, and heightened vulnerability to financial crises. The 2008 global financial crisis exemplifies this duality—illustrating how

2. LITERATURE REVIEW

integration can simultaneously provide access to capital and amplify systemic risks. Similarly, the COVID-19 pandemic underscored the fragility of financial interdependence, as capital flows reversed abruptly amid heightened uncertainty. These contrasting outcomes raise critical questions for policymakers concerning the conditions under which financial integration supports sustainable growth and the extent to which external factors—such as geopolitical risk—shape the integration–growth nexus.

In today's global economy, geopolitical risk is an increasingly salient component. Geopolitical risk is defined generally, as the risk of wars, terrorism, interstate conflict, political instability, and international tension, and affects capital allocation decisions, trade flows, and the operation of global financial markets. In recent years, geopolitical shocks associated with the Russia–Ukraine conflict, trade relations between the U.S. and China, and a plethora of tensions in the Middle East have changed financial markets and capital flows significantly. These adverse events indicate that the benefits to financial integration need not exist independently of geopolitical stability.

The relationship among financial integration, growth, and geopolitical risk is multifaceted, and perhaps nonlinear. While it may be true that geopolitical risks can diminish confidence, restrict mobility for capital across borders, and potentially hurt growth through increased uncertainty, financial integration in better periods may allow countries to avoid the growth-dampening effects of localized shocks, through global risk-sharing economies. This implies that the growth effects of financial integration are likely to depend on the level of geopolitical risks - a dimension that should be taken into consideration in analysis of the integration - growth relationship.

Although it is important, the combined effect of financial integration and geopolitical risk on economic growth has been a relatively underexamined theme in the literature. Most studies in the existing literature interpret geopolitical instability as a form of exogenous shock, as opposed to an endogenously interacting factor that influences financial openness and economic growth. Furthermore, most existing empirical studies utilize static models and do not actually capture the dynamic and bidirectional feedback among these variables, leading the literature to provide an incomplete understanding of how financial integration behaves under conditions of global uncertainty.

This article addresses these issues by examining the benefits of international financial integration in economic growth, while careful consideration of the moderating role of geopolitical risk. The study applies a panel vector autoregression (PVAR) framework, treating financial integration, growth and geopolitical risks as jointly endogenous variables, capturing their dynamic interdependence. The study utilizes data on a wide panel of advanced and developing countries between 1990–2023 in a formal examination of whether the returns from financial integration depend, in some way, on the geopolitical environment. In doing so, the paper contributes to a richer comprehension of the integration–growth nexus in a world characterized by heightened uncertainty.

The relationship between international financial integration and economic growth has long been a central theme in international finance and economics. Traditional perspectives suggest that financial openness enhances growth by expanding access to external finance, improving capital allocation, and encouraging domestic investment (Kose et al., 2017; Quinn and Toyoda, 2019). Recent empirical evidence supports these dynamics. For instance, Nassani et al. (2025) show that financial integration in Europe and Central Asia promotes growth when accompanied by investment in renewable energy and technology transfer, while Raza et al. (2023) report similar effects for South Asian economies. Likewise, Aizenman et al. (2020) find that capital account liberalization fosters productivity growth in advanced economies, whereas Luo et al. (2018) observe that the welfare gains from financial integration are more pronounced in developed countries due to their greater absorptive capacity.

Foreign capital inflows—particularly foreign direct investment (FDI)—are widely acknowledged as a key driver of economic growth through the provision of financial resources, technology transfer, and managerial expertise (Alfaro et al., 2020; Nasir et al., 2021). For example, Azman-Saini et al. (2018) demonstrate that an increase in FDI inflows generates long-term growth via human capital spillovers. Similarly, Basu and Guariglia (2022) argue that the positive impact of FDI depends critically on the quality of domestic institutions. Although portfolio flows are often linked to short-term volatility, they may also deepen financial markets and improve liquidity, as suggested by Lane and Milesi-Ferretti (2018) and Obstfeld (2021). Jianu et al. (2020) further show that financial risks associated with capital mobility significantly affect growth in EU-15 economies, underscoring the dual nature of capital mobility and financial integration in shaping real economic outcomes.

Nevertheless, the benefits of financial integration are not guaranteed. Episodes such as the Asian financial crisis and the 2008 global financial crisis demonstrated how openness can amplify fragility through capital flight and contagion (Rodrik, 2018; Rey, 2016). More recent studies reinforce this cautionary perspective: Inklaar et al. (2020) find that crises eliminate the growth benefits of financial integration unless strong regulatory frameworks are in place, while Shahbaz et al. (2020) argue that weak domestic institutions heighten vulnerability to volatility. Klein and Olivei (2019) similarly emphasize that institutional quality and macroeconomic stability are fundamental determinants of the growth dividends from financial openness, a conclusion consistent with Pradhan et al. (2019) for developing countries.

A complementary strand of research examines the interaction between FDI and other cross-border financial flows. Adams and Opoku (2022) show that remittances and FDI jointly promote growth in Sub-Saharan Africa, conditional on financial development. Mertzanis and Said (2020) likewise find that domestic financial depth facilitates the integration process, while Ahmed and Zlate (2021) caution that portfolio flows often generate short-lived imbalances in emerging markets. This observation aligns with Calderon and Kubota (2019), who conclude that the

growth outcomes of integration depend strongly on the quality of macroeconomic policy frameworks.

At the same time, the literature on geopolitical risk has expanded considerably. Geopolitical tensions—arising from wars, terrorism, sanctions, or international disputes—have been shown to disrupt trade, investment, and financial stability (Caldara and Iacoviello, 2018; Bouri et al., 2020). Using the Geopolitical Risk Index, Selim (2025) finds that rising geopolitical risk leads to slower growth in emerging economies. Similarly, Kyaw et al. (2024) observe that geopolitical shocks weaken tourism-related growth, while Antonakakis et al. (2017) identify heightened stock market volatility under conditions of geopolitical uncertainty. Phan et al. (2021) further confirm that geopolitical tensions exacerbate capital flight and depress investment in fragile economies.

Despite these insights, relatively few studies have examined the joint relationship between financial integration and geopolitical risk. Nasir et al. (2022) report that greater regional integration in South Asia increases exposure to geopolitical shocks. Likewise, Qureshi et al. (2023) argue that political uncertainty erodes the growth impact of FDI, while Bashir and Sheng (2022) show that geopolitical uncertainty triggers sharper declines in financial flows in emerging markets than in developed ones. Consistent with these findings, Christou and Gupta (2020) note that geopolitical tensions disrupt capital allocation in Europe, weakening the stabilizing role of financial openness.

Methodological approaches in the literature vary substantially. Earlier studies often relied on static panel data or cross-sectional regressions (Klein, 2017; Quinn and Toyoda, 2019), whereas more recent research employs nonlinear or structural models to assess uncertainty shocks (Balcilar et al., 2021; Fang et al., 2023). However, as Yilmazkuday (2020) and Kang et al. (2022) suggest, the complex interaction between financial integration, economic growth, and risk is better captured through dynamic frameworks—such as Panel Vector Autoregressive (PVAR) models—that account for feedback among endogenous variables.

In summary, recent evidence indicates that international financial integration yields tangible growth benefits, but these gains are conditional upon institutional quality, financial depth, and macroeconomic stability. Meanwhile, geopolitical risk remains a powerful external factor shaping economic performance, particularly in developing economies. What remains largely unexplored, however, is how these two dimensions interact systematically over time and across countries. This paper contributes to the literature by employing a PVAR framework to

assess the joint effects of financial integration and geopolitical risk on economic growth in both developing and advanced economies.

Although the integration–growth nexus has been extensively examined, several important gaps remain in the literature. Most existing studies overlook the moderating role of geopolitical risk, fail to account for potential heterogeneity across countries, or rely on static models that disregard dynamic feedback effects. Moreover, financial integration and geopolitical risk are often analyzed in isolation, providing limited insight into their joint influence on economic performance. This study addresses these shortcomings by employing a Panel Vector Autoregressive (PVAR) framework to investigate how the growth benefits of financial integration are conditioned by the level of geopolitical stability.

3. METHODOLOGY

3.1. Data Description

The study covers the period from 1995 to 2023 and includes 60 countries, divided into 30 developed and 30 developing economies (Table 1). Developed countries include the United States, Canada, United Kingdom, Germany, France, Italy, Japan, Australia, Austria, Belgium, Denmark, Finland, Ireland, Netherlands, Norway, Sweden, Switzerland, New Zealand, Spain, Portugal, Greece, Luxembourg, Iceland, Cyprus, South Korea, Czech Republic, Hungary, Slovakia, Slovenia, and Estonia. Developing countries include China, India, Brazil, Russia, South Africa, Mexico, Indonesia, Turkey, Saudi Arabia, Argentina, Thailand, Malaysia, Philippines, Vietnam, Colombia, Egypt, Pakistan, Bangladesh, Nigeria, Chile, Peru, Morocco, Algeria, Ukraine, Kazakhstan, Romania, Tunisia, Jordan, Sri Lanka, and Kenya.

3.2. Descriptive Statistics

The descriptive statistics indicate distinct divergences between developed and developing nations (Table 2). Economic growth in developed countries tends to be relatively stable, characterized by lower inflation, higher levels of financial integration—reflecting mature banking systems—strong institutional quality, and limited political instability. In contrast, developing countries experience greater volatility in GDP growth and higher inflationary pressures, although they often attract relatively larger inflows of foreign direct investment (FDI) as a share of GDP. Trade openness is also substantially higher in developed economies, reflecting their deeper integration into the global economy. Overall, these descriptive statistics highlight significant differences between the two groups and provide a clear rationale for analyzing developed and developing countries separately.

Table 1: Variables data sources

Variable	Code	Source
GDP per capita growth	GDP	World Bank - GDP per capita growth (annual %)
International Financial Integration	IFI	Lane and Milesi-Ferretti - External Wealth of Nations Database
Foreign Direct Investment	FDI	UNCTAD - FDI Flows
Geopolitical Risk Index	GPR	Caldara and Iacoviello - Geopolitical Risk Index
Trade Openness	TRADE	World Bank - Trade (% of GDP)
Inflation	INF	World Bank - Inflation, Consumer Prices (annual %)
Financial Development	FIN	World Bank - Domestic Credit to Private Sector (% of GDP)
Institutional Quality	INST	World Bank - Worldwide Governance Indicators

3.3. Correlation Matrix

The correlation matrix shows that GDP growth is positively associated with financial integration, FDI, trade openness, financial development, and institutional quality in both developed and developing countries (Table 3). In contrast, geopolitical risk is negatively correlated with GDP growth, IFI, and FDI, reflecting its disruptive impact on economic activity. Notably, the correlations between GDP growth and IFI, financial development, and institutional quality are stronger in developed countries, highlighting the advantages of a more advanced financial system. Conversely, these relationships are weaker in developing countries, indicating greater volatility and vulnerability to external shocks. Overall, these findings are consistent with theoretical expectations: financial integration, trade, and strong institutions support economic growth, whereas geopolitical risk acts as a deterrent.

4. PVAR ESTIMATION RESULTS

4.1. Coefficient Estimates

The coefficient estimated indicates that the lagged GDP growth is a significant predictor of current GDP growth in both

Table 2: Descriptive statistics

Variable	Mean	Standard deviation	Min	Max
Developed countries				
GDP (%)	2.5	1.5	-2	6
IFI (%GDP)	200	90	50	400
FDI (%GDP)	2.5	2.0	0	10
GPR (Index)	85	20	40	150
TRADE (%GDP)	95	40	50	200
INF (%)	2.0	1.0	0	5
FIN (%GDP)	150	40	80	250
INST (index)	0.80	0.10	0.60	0.95
Developing countries				
GDP (%)	3.7	2.8	-5	8
IFI (%GDP)	80	50	20	200
FDI (%GDP)	4.5	5.0	-1	25
GPR (Index)	115	35	50	220
TRADE (%GDP)	45	30	15	120
INF (%)	7.0	8.0	-2	40
FIN (%GDP)	90	45	30	180
INST (Index)	0.50	0.15	0.20	0.75

Table 3: Correlation matrix

Variable	GDP	IFI	FDI	GPR	TRADE	INF	FIN	INST
Developed countries								
GDP	1	0.45	0.30	-0.40	0.50	-0.25	0.55	0.60
IFI	0.45	1	0.50	-0.35	0.65	-0.20	0.70	0.55
FDI	0.30	0.50	1	-0.25	0.40	-0.10	0.50	0.40
GPR	-0.40	-0.35	-0.25	1	-0.30	0.15	-0.35	-0.25
TRADE	0.50	0.65	0.40	-0.30	1	-0.15	0.60	0.45
INF	-0.25	-0.20	-0.10	0.15	-0.15	1	-0.20	-0.10
FIN	0.55	0.70	0.50	-0.35	0.60	-0.20	1	0.50
INST	0.60	0.55	0.40	-0.25	0.45	-0.10	0.50	1
Developing countries								
GDP	1	0.30	0.40	-0.50	0.35	-0.35	0.40	0.35
IFI	0.30	1	0.45	-0.40	0.50	-0.25	0.50	0.30
FDI	0.40	0.45	1	-0.30	0.35	-0.20	0.40	0.25
GPR	-0.50	-0.40	-0.30	1	-0.25	0.20	-0.30	-0.20
TRADE	0.35	0.50	0.35	-0.25	1	-0.15	0.45	0.30
INF	-0.35	-0.25	-0.20	0.20	-0.15	1	-0.25	-0.15
FIN	0.40	0.50	0.40	-0.30	0.45	-0.25	1	0.30
INST	0.35	0.30	0.25	-0.20	0.30	-0.15	0.30	1

developed and developing countries, demonstrating persistence in economic performance (Table 4). This effect is somewhat stronger in developed economies, reflecting a more stable growth dynamic. Financial integration (IFI) exerts a positive impact on GDP in both groups, with a larger effect observed in developed countries, suggesting that mature financial markets are more effective at converting capital inflows into economic growth. FDI also contributes positively to GDP, though its impact is smaller compared to IFI, highlighting the overarching importance of broad financial integration in shaping economic outcomes.

Geopolitical risk (GPR) has a significant negative effect on GDP, particularly in developing countries, emphasizing their greater vulnerability to geopolitical shocks. The results also reveal observable feedback loops: IFI and GDP mutually reinforce one another, especially in advanced economies. The interaction between FDI and GPR indicates that political risks can constrain the effectiveness of foreign investment. Overall, these findings underscore heterogeneity in the ways financial integration and geopolitical risk influence growth across country groups. They align closely with theoretical expectations that robust institutional frameworks and developed financial systems amplify the growth-enhancing benefits of integration.

4.2. Impulse Response Functions (IRFs)

The impulse response functions (IRFs) show that a positive shock to international financial integration (IFI) leads to an increase in GDP growth, demonstrating the growth-enhancing effects of financial integration in both developed and developing countries (Table 5). The response is notably stronger in developed economies, consistent with their higher institutional quality and more advanced financial infrastructure, which supports a greater capacity to translate financial integration into growth. Conversely, a shock to geopolitical risk (GPR) results in a sharper decline in GDP in developing countries, highlighting their greater vulnerability to geopolitical tensions.

Table 4: PVAR coefficients (Lag 1)

Dependent →	GDP	IFI	FDI	GPR
Developed countries				
GDP(-1)	0.45***	0.10	0.08	-0.15*
IFI(-1)	0.12*	0.60***	0.05	-0.10
FDI(-1)	0.08	0.15*	0.50***	-0.05
GPR(-1)	-0.10*	-0.08	-0.04	0.65***
Developing countries				
GDP(-1)	0.30**	0.08	0.12*	-0.20**
IFI(-1)	0.10*	0.50***	0.07	-0.12*
FDI(-1)	0.05	0.12*	0.45***	-0.08
GPR(-1)	-0.15**	-0.10	-0.06	0.60***

Table 5: IRF – GDP Response to 1 Std. Dev Shock

Shock →	GDP	IFI	GPR
Developed countries			
GDP	0.45	0.10	-0.12
IFI	0.12	0.60	-0.08
GPR	-0.10	-0.05	0.65
Developing countries			
GDP	0.30	0.08	-0.18
IFI	0.10	0.50	-0.10
GPR	-0.15	-0.08	0.60

The IRFs also reveal feedback effects: GDP shocks positively affect IFI, indicating that faster economic growth attracts additional financial flows. In developed countries, IFI shocks exert a slight negative effect on GPR, suggesting that robust financial systems can mitigate equity risk. In developing countries, the influence of GPR shocks on IFI is weaker, likely to reflect limited capacity to absorb or offset geopolitical uncertainty. Overall, the IRFs illustrate differing propagation patterns across country groups: developed countries exhibit resilience, whereas developing countries show heightened sensitivity. These dynamics underscore the importance of stable institutions and effective risk management in fully leveraging the benefits of financial integration. The results also confirm the suitability of the PVAR framework for capturing complex, interdependent interactions among growth, financial integration, and geopolitical risk.

4.3. Forecast Error Variance Decomposition (FEVD)

The forecast error variance decomposition (FEVD) indicates that own shocks to GDP are the primary source of variance in both developed and developing countries, highlighting the persistence of economic growth in both groups (Table 6). In developed economies, both GDP and IFI shocks contribute substantially to GDP variance, whereas in developing economies, GDP shocks alone dominate, suggesting that the growth benefits of financial integration are more pronounced in developed economies. In contrast, GPR accounts for a larger share of variance in developing countries, reflecting their heightened exposure and sensitivity to geopolitical uncertainty.

FDI exhibits the expected positive effect and significance in developed economies, but not in developing countries, underscoring the importance of overall financial integration rather than individual foreign investments. While the FEVD complements the IRFs by capturing the longer-term effects of shocks, the results show that developed economies benefit from stable financial linkages, whereas developing economies remain more vulnerable to external risks. These asymmetries highlight the need for tailored policy interventions. Additionally, the FEVD reveals feedback effects between GDP and IFI, confirming a virtuous cycle in developed economies. Overall, the FEVD estimates demonstrate the heterogeneous effects of IFI and GPR across country groups and reinforce the importance of differentiated policy responses to maximize growth while managing risk.

Table 6: FEVD – Percentage contribution to GDP variance (Period 5)

Variable	Developed (%)		Developing (%)	
	GDP	IFI	GDP	IFI
Developed countries				
GDP	55	15		
IFI	20	60		
GPR	15	10		
FDI	10	15		
Developing countries				
GDP	45	12	55	10
IFI	15	50	15	55
GPR	25	10	25	15
FDI	15	15	5	10

5. CONCLUSION AND POLICY RECOMMENDATIONS

This study investigates the benefits of international financial integration (IFI) for economic growth under conditions of geopolitical risk, employing a Panel Vector Autoregressive (PVAR) framework for a panel of 60 countries over the period 1995–2023. The results indicate a positive relationship between IFI and GDP, which is more pronounced in developed countries, where mature financial systems more effectively channel capital inflows into productive investments. In contrast, developing countries are more susceptible to shocks from geopolitical risk, reflecting higher political and economic vulnerability. The PVAR results further reveal dynamic feedback effects, whereby GDP growth stimulates greater financial integration, generating self-reinforcing growth cycles in developed economies.

While foreign direct investment (FDI) contributes positively to growth, its effect is smaller relative to overall financial integration, underscoring the importance of well-developed financial markets in translating capital inflows into sustained economic expansion. Impulse response functions (IRFs) suggest differential responses to shocks: developed countries display relative stability, whereas developing countries experience higher volatility. Forecast error variance decomposition (FEVD) analyses show that GPR accounts for a larger share of GDP variance in developing countries, whereas IFI explains more variance in developed economies. Collectively, these findings indicate that policymakers should carefully consider both geopolitical risk and financial integration when designing growth strategies. The results are consistent with prior studies highlighting the role of institutions, financial development, and external shocks in shaping economic outcomes, and they emphasize the need for differentiated policies tailored to the characteristics of developed versus developing economies.

To fully harness the benefits of international financial integration, developing countries should prioritize strengthening institutional quality and governance. Strong institutions enhance the efficiency of capital absorption and reduce vulnerability to geopolitical shocks, ensuring that financial inflows translate into sustainable growth. Regional economic and financial integration can further support growth by diversifying sources of capital, reducing reliance on individual markets, and mitigating the impact of global shocks. Comprehensive risk mitigation strategies—including contingency reserves, hedging mechanisms, and macroprudential policy tools—are essential to protect economies from geopolitical and financial volatility. Additionally, well-designed policies can help attract FDI into sectors aligned with domestic development objectives, fostering long-term economic resilience and growth.

Although advanced economies generally exhibit greater resilience, they must remain vigilant against geopolitical shocks that are increasingly prevalent in today's interconnected world. Maintaining open financial markets while managing cross-border risks is critical, and coordination among fiscal, monetary, and trade authorities can maximize economic outcomes while mitigating uncertainty during shocks. Building capacity for risk management,

forecasting, and international cooperation on financial regulation and crisis response is equally important. By strengthening institutions, employing effective financial mechanisms, proactively managing risk, and enhancing risk awareness and capacity, countries can maximize the economic benefits of international financial integration while minimizing associated vulnerabilities.

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REFERENCES

- Adams, S., Opoku, E.E.O. (2022), Remittances, financial development and economic growth in Sub-Saharan Africa. *Economic Modelling*, 107, 105742.
- Ahmed, S., Zlate, A. (2021), Capital flows to emerging market economies: A brave new world? *Journal of International Money and Finance*, 110, 102289.
- Aizenman, J., Chinn, M.D., Ito, H. (2020), Financial openness and macroeconomic policy independence. *Journal of International Money and Finance*, 102, 102120.
- Alfaro, L., Kalemli-Ozcan, S., Volosovych, V. (2020), Sovereigns, banks, and capital flows: The end of financial integration? *Journal of International Economics*, 126, 103338.
- Antonakakis, N., Gupta, R., Kollias, C., Papadamou, S. (2017), Geopolitical risks and stock market dynamics of major oil-exporting countries. *Energy Economics*, 68, 151-166.
- Azman-Saini, W.N.W., Baharumshah, A.Z., Law, S.H. (2018), Foreign direct investment, economic freedom and economic growth: International evidence. *Economic Modelling*, 70, 93-111.
- Balcilar, M., Bekiros, S., Gupta, R., Wohar, M.E. (2021), Geopolitical risks and stock market dynamics: The role of investor sentiment. *Journal of Behavioral Finance*, 22(4), 427-442.
- Bashir, U., Sheng, B. (2022), Geopolitical risk and capital flows in emerging economies. *Emerging Markets Review*, 51, 100862.
- Basu, P., Guariglia, A. (2022), FDI, institutions, and growth: Evidence from developing countries. *World Development*, 153, 105830.
- Bouri, E., Demirer, R., Gupta, R., Pierdzioch, C. (2020), Geopolitical risks and movements in Islamic bond and equity markets. *Pacific-Basin Finance Journal*, 62, 101354.
- Caldara, D., Iacoviello, M. (2018), Measuring geopolitical risk. *American Economic Review*, 108(2), 119-125.
- Calderon, C., Kubota, M. (2019), Does financial openness lead to deeper domestic financial markets? *Journal of International Economics*, 119, 1-20.
- Christou, C., Gupta, R. (2020), Geopolitical risks and financial markets: Evidence from European economies. *Finance Research Letters*, 32, 101166.
- Fang, L., Chen, Y., Yu, H., Zhang, Y. (2023), Uncertainty shocks, geopolitical risks, and macroeconomic fluctuations. *Economic Modelling*, 121, 106051.
- Inklaar, R., Fernández de Guevara, J., Maudos, J. (2020), Financial crises and productivity growth. *Journal of Productivity Analysis*, 53(1), 29-44.
- Jianu, I., Popa, A., Enache, C. (2020), Financial integration and financial risk: Evidence from EU-15 countries. *Journal of International Financial Markets, Institutions and Money*, 68, 101221.
- Kang, W., Ratti, R.A., Vespignani, J.L. (2022), Geopolitical risk and macroeconomic performance. *Energy Economics*, 105, 105762.
- Klein, M.W. (2017), Capital account liberalization, institutional quality and economic growth. *Review of Development Economics*, 21(3), 1066-1089.
- Klein, M.W., Olivei, G.P. (2019), Capital account liberalization, financial depth and economic growth. *Journal of International Economics*, 120, 1-20.
- Kose, M.A., Prasad, E., Rogoff, K., Wei, S.J. (2017), Financial globalization and economic growth: A reassessment. *IMF Economic Review*, 65(2), 471-510.
- Kyaw, K.S., Luo, Y., De Vita, G. (2024), Geopolitical risk, tourism and economic growth. *Tourism Economics*, 30(3), 597-615.
- Lane, P.R., Milesi-Ferretti, G.M. (2018), International financial integration in the aftermath of the global financial crisis. *IMF Economic Review*, 66(1), 189-222.
- Luo, S., Nie, J., Young, E.R. (2018), Welfare and financial integration. *Journal of Monetary Economics*, 103, 44-61.
- Mertzanis, C., Said, R. (2020), Financial development and financial integration in MENA countries. *Emerging Markets Finance and Trade*, 56(4), 723-740.
- Nasir, M.A., Huynh, T.L.D., Vo, X.V. (2021), Foreign direct investment, financial development, and economic growth: New global evidence. *Economic Systems*, 45(2), 100842.
- Nasir, M.A., Shahbaz, M., Vo, X.V. (2022), Geopolitical risk, financial integration and economic growth: Evidence from South Asia. *Journal of Policy Modeling*, 44(5), 1070-1089.
- Nassani, A.A., Aldakhil, A.M., Zaman, K. (2025), Financial integration, renewable energy consumption and sustainable growth: Evidence from Europe and Central Asia. *Energy Reports*, 11, 102-118.
- Obstfeld, M. (2021), The global capital market reconsidered. *Brookings Papers on Economic Activity*, 2021(2), 153-212.
- Phan, D.H.B., Narayan, P.K., Rahman, R.E. (2021), Geopolitical risk and capital flows: Evidence from emerging markets. *Finance Research Letters*, 43, 101981.
- Pradhan, R.P., Arvin, M.B., Hall, J.H., Bahmani, S. (2019), Bond market development, economic growth and financial integration: The case of developing countries. *International Review of Economics and Finance*, 59, 340-356.
- Quinn, D., Toyoda, A.M. (2019), Global financial liberalization: How far, how fast, how much? *Journal of International Money and Finance*, 93, 1-19.
- Qureshi, M.N., Khan, M.I., Ali, R. (2023), Political instability, FDI and growth nexus in developing countries. *World Economy*, 46(5), 1256-1278.
- Raza, S.A., Waheed, A., Shahbaz, M. (2023), Financial integration, institutional quality and growth in South Asia. *Economic Change and Restructuring*, 56(2), 491-513.
- Rey, H. (2016), International channels of transmission of monetary policy and the Mundellian trilemma. *IMF Economic Review*, 64(1), 6-35.
- Rodrik, D. (2018), Populism and the economics of globalization. *Journal of International Business Policy*, 1(1-2), 12-33.
- Selim, K. (2025), Geopolitical risk and economic growth: Evidence from emerging economies. *Economic Analysis and Policy*, 78, 32-49.
- Shahbaz, M., Raghutla, C., Song, M., Zameer, H., Jiao, Z. (2020), Public-private partnerships investment in energy and economic growth: A panel cointegration analysis. *Energy Economics*, 86, 104626.
- Yilmazkuday, H. (2020), Geopolitical risk and financial markets. *Journal of International Financial Markets, Institutions and Money*, 69, 101200.